WHAT IS CLAIMED IS:

1. An integrated circuit comprising:

one or more functional blocks to be tested when said integrated circuit is placed in a test mode;

one or more test structures configured to test said one or more functional blocks when said integrated circuit is placed in said test mode;

a wireless interface which receives said test data over a wireless connection; and

a test access mechanism which controls input of said received test data to said test structures.

- An integrated circuit in accordance with claim 1, wherein: said wireless interface implements an Internet Protocol stack which extracts test data from, and transmits test results over, said wireless connection in formatted frames.
- 3. An integrated circuit in accordance with claim 2, wherein: said test data comprises a frame comprising one or more bytes, words, or blocks and corresponding bits of said one or more bytes, words, or blocks comprise test data for driving respective different test structures on said integrated circuit.
- 4. An integrated circuit in accordance with claim 1, wherein: said test structures comprise one or more scan chains; and said test access mechanism comprises a scan chain loading mechanism.
- An integrated circuit in accordance with claim 4, wherein: said scan chain loading mechanism simultaneously loads a plurality of scan chains.
 - 6. An integrated circuit in accordance with claim 4, wherein:

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said scan chain loading mechanism loads one or more scan chains in parallel.

7. A system for testing an integrated circuit, comprising: a test station comprising:

a wireless interface which receives test data for said integrated circuit and transmits said test data over a wireless connection; and one or more respective integrated circuits, each comprising:

one or more functional blocks to be tested when said integrated circuit is placed in a test mode;

one or more test structures configured to test said one or more functional blocks when said integrated circuit is placed in said test mode;

a wireless interface which receives and extracts said test data from said wireless connection; and

a test access mechanism which controls input of said received test data to said test structures.

8. A system in accordance with claim 7, wherein:

said wireless interface implements an Internet Protocol stack which extracts test data from, and transmits test results over, said wireless connection in formatted frames.

9. A system in accordance with claim 8, wherein:

said test data comprises a frame comprising one or more bytes, words, or blocks and corresponding bits of said one or more bytes, words, or blocks comprise test data for driving respective different test structures on said respective one or more integrated circuits.

10. A system in accordance with claim 7, wherein:

said test structures on said one or more respective integrated circuits comprise one or more scan chains; and

said test access mechanism on said one or more respective integrated circuits comprises a scan chain loading mechanism.

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- 11. A system in accordance with claim 10, wherein: said scan chain loading mechanism on said one or more respective integrated circuits simultaneously loads a plurality of scan chains.
- 12. A system in accordance with claim 10, wherein: said scan chain loading mechanism on said one or more respective integrated circuits loads one or more scan chains in parallel.
 - 13. A method for testing an integrated circuit, comprising: obtaining test data;

sending said test data via a wireless interface over a wireless connection to one or more respective device under tests, each said one or more respective device under tests comprising one or more functional blocks to be tested when said integrated circuit is placed in a test mode, one or more test structures configured to test said one or more functional blocks when said integrated circuit is placed in said test mode, a wireless interface which receives and extracts said test data from said wireless connection; and a test access mechanism which controls input of said received test data to said test structures.

14. A method in accordance with claim 13, comprising:
receiving test results via said wireless interface from said wireless
connection from said one or more respective device under tests, said test
results returned from said one or more test structures of said one or more
respective device under tests from application of said test data to said one or

more functional blocks.

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